Claim

5

10

15

20

25

1. A control program for a vehicle comprising:

a platform program for making a computer execute processing for inputting data from a hardware device; an application program for making the computer execute processing for a vehicle control in accordance with an AP interface; and a coupling processing program,

wherein the platform program provides data based on inputted data to processing using the coupling processing program in accordance with a PF interface as an interface standardized so as to be commonly utilized by processing using the application program made in accordance with a required specification of a different control apparatus for a vehicle, and

wherein the coupling processing program makes the computer execute processing for performing mediation in the processing using the application program by converting the data provided from the processing using the platform program in accordance with the PF interface so as to be adapted to the AP interface as an interface satisfying required specification of the control apparatus for a vehicle of a developing object.

- 2. The control program for a vehicle according to claim 1, wherein an object standardized as the PF interface is a structure of the data provided through the PF interface and update timing of these data.
 - The control program for a vehicle according to claim 1,

wherein the platform program has a program for making the computer execute processing for providing the data provided through the PF interface in a data format of accuracy higher than that requested in the processing using the application program, and

5

10

15

20

25

wherein the coupling processing program has a program for making the computer execute processing for adjusting a data format of the data provided through the PF interface so as to form the data format satisfying the required specification of the application program, and providing the adjusted data in accordance with the AP interface.

4. The control program for a vehicle according to claim 1, wherein the platform program has a program for making the computer execute processing for providing the data provided in accordance with the PF interface in sampling timing higher than that requested in the processing using the application program, and

wherein the coupling processing program has a program for making the computer execute processing for adjusting provision timing of the data provided through the PF interface to the sampling timing of data satisfying the required specification, and providing these adjusted data by the AP interface.

5. The control program for a vehicle according to claim 1, wherein the AP interface is constructed such that the data converted by the coupling processing program is referred by the

processing using the application program.

5

20

25

- 6. The control program for a vehicle according to claim 1, wherein the AP interface is constructed such that the data converted by the coupling processing program are transmitted to the processing using the application program when there is a request of the data by the processing using the application program.
- 7. The control program for a vehicle according to claim 1, wherein the coupling processing program has a program for storing the data acquired through the PF interface or the converted data to memory means, and providing data acquired by converting the data stored in the memory means, or the data stored in the memory means through the AP interface.
 - 8. The control program for a vehicle according to claim 7, wherein the platform program has an interruption processing program for making the computer input the data from the hardware device by interruption from the hardware device, and the interruption processing program has a program for making the computer execute processing for providing data based on the inputted result through the PF interface, and

wherein the coupling processing program further has an acquiring program as a program for making the computer execute processing for receiving data through the PF interface during an inhibition of a dispatch of another processing, and storing

the received data in the memory means.

9. A control program for a vehicle comprising:

a platform program for making a computer execute processing for acquiring data and outputting data based on the acquired data;

an application program for making the computer execute processing for generating data of an output object; and

a coupling processing program,

10

15

5

wherein the platform program is a program for an output from processing using the coupling processing program in accordance with a PF interface as an interface standardized so as to be commonly utilized by processing using the application program made in accordance with a required specification of a different control apparatus for a vehicle,

wherein the coupling processing program makes the computer execute processing for converting the data provided from the processing using the application program so as to be adapted to the PF interface in accordance with an AP interface as an interface satisfying the required specification of the control apparatus for a vehicle of a developing object, and mediating converted data in the processing using the platform program, and

25

20

wherein the application program provides the data of the output object to the processing using the coupling processing program in accordance with the AP interface.

- 10. The control program for a vehicle according to claim 9, wherein the AP interface is constructed such that the AP interface itself obtains data stored by the processing using the application program by the processing using the coupling processing program.
- 11. A control program for a vehicle comprising:

5

10

15

20

25

the control program for a vehicle according to any one of claims 1 to 8; and

the control program for a vehicle according to claim 9 or 10.

12. A control apparatus for a vehicle comprising:

the control program for a vehicle according to any one of claims 1 to 11; and

a computer for executing the control program for a vehicle.

13. A generating method of a control program for a vehicle comprising the steps of:

generating a platform program as a program for making a computer execute processing for inputting data from a hardware device;

generating an application program as a program for making the computer execute processing using data provided;

generating a coupling processing program as a program for making the computer execute processing for performing mediation in the processing using the application program by converting

the data provided from the processing using the platform program in accordance with a PF interface so as to be adapted to an AP interface as an interface satisfying a required specification of a control apparatus for a vehicle of a developing object, and

generating a control program for a vehicle by linking the platform program, the coupling processing program and the application program,

5

10

15

wherein the platform program provides data based on inputted data to processing using the coupling processing program in accordance with a PF interface as an interface standardized so as to be commonly utilized by the processing using the application program made in accordance with the required specification of a different control apparatus for a vehicle, and

wherein the application program provides the data from the processing using the coupling processing program in accordance with the AP interface.